

Remarks

By foregoing Amendment, claims 1 – 10 and 27 are cancelled. Claims 11, 19, 26, 28, 31, and 32 are currently amended. New claims 33 and 34 are added. Amendment and favorable consideration thereof is earnestly requested in light of the following remarks.

The Examiner has previously required an election to one of two groups of claims (1-10, 11-32). On April 19, 2006 Wesley W. Whitmyer, Jr. filed an Election Pursuant to the Restriction Requirement. Applicant elected Group II claims 11 – 32 to prosecute in this case.

The examiner has rejected claim 19 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner rejected claim 19, because the following terms lacked the proper antecedent basis: "said feed air duct"; "said process air"; and "said feed duct". The Applicant has amended claim 19, so that terms have a proper antecedent basis. The Applicant respectfully submits that said process air has an antecedent basis in claim 11.

The Applicant has added new independent claim 33 and dependent claim 34. The applicant respectfully submits independent claim 33 is allowable as it is dependent claim 20 rewritten in independent form. The examiner has allowed the subject matter of dependent claim 20, however objected to it as being dependent on a rejected base claim. Claim 34 is dependant on claim 33.

The Examiner has rejected claims 11–12, 22, and 26 under 35 U.S.C. 102(b) as being anticipated by Hiller (U.S. Patent No. 872,729). The Applicant respectfully submits that the present disclosure is not anticipated by Hiller.

Hiller does not disclose all of the elements of the named invention claimed in independent claim 11, and independent claim 26. Hiller is missing a central duct forming a flow duct for process air as required by independent claim 11, and 26. Rather, the drum 9 in Fig. 2 in the Hiller apparatus is not a duct for process air, but a drum for mixing concrete. Second, Hiller is missing a container central duct widening circumferentially and opening towards the upper region of the process chamber as required by independent claim 11.

Further, Hiller is missing a fan arranged in a lower region of said container central duct as required by dependent claims 12, and 22, and independent claim 26. Rather, Hiller does not disclose a fan, but a dispersing plate 12 which serves to uniformly moisten the mixed compound which is discharged from the mixing drum 9. The dispersing plate is not suited to produce an air flow in the drum 9 from top to bottom thereof. Hiller is also missing the fan blades whose radially outer ends at least partly project into said opening area of said container central duct into said process chamber as required by independent claim 26.

There is not motivation to modify Hiller to arrive at the claimed invention. There is no suggestion in Hiller that a cement mixing machine, can work to treat particulate-shaped material, in particular for mixing, drying, graduating, pelletizing and/or coating the material. Furthermore, the mixture of the cement in Hiller is driven by gravity. Cement is poured into the mixer, mixed, and then continues to fall until it exits the mixer through the bottom. On the other hand, the claimed invention involves using a

mixture of air pressure and gravity to circulate particulate-shaped material through a process chamber, wherein the particles rise and fall.

For the foregoing reasons, Applicant respectfully submits that pending claims 11-12, 22, and 26 are patentable over Hiller.

The Examiner has rejected dependent claims 23, and dependent claim 30 under 35 U.S.C. 103(a) as being obvious over Hiller in view of Engels (U.S. Patent No. 3,734,471). The Applicant respectfully submits that the present disclosure is not obvious over Hiller in view of Engels.

First, neither Hiller nor Engels disclose all of the elements of the named invention as claimed in claims 23, 30. Hiller is missing a central duct forming a flow duct for process air, and a fan arranged in a lower region of said container central duct as required by claims 23, and 30. Engels is missing almost every element of the claimed invention as is evident from its disclosure.

There is no motivation to combine Hiller and Engels to arrive at the claimed invention. Hiller is directed towards mixing concrete. There is no suggestion that the plate in Hiller can work with a spray nozzle directly attached to it. In fact Hiller teaches that the spray nozzle is located remote from the plate. There is no suggestion that the device in Hiller, a device for uniformly wetting wood chips with glue in which the wood chips are propelled along a helical path with the glue being applied by centrifugal action would work to mix concrete. Nonetheless, even if one were to combine Hiller with Engels, as suggested by the examiner, one would be equally likely to get a cement mixer with helical gears to mix the cement, or a device for wetting wood chips with glue in which the woods drips are mixed in a vertical mixing drum.

For the foregoing reasons, Applicant respectfully submits that pending claims 23 and 30 are patentable over Hiller in view of Engels.

The Examiner has rejected claims 11-14, 16, and 26-28 under 35 U.S.C. 102(b) as being anticipated by Herfeld (U.S. Patent No. 4,002,325). The Applicant respectfully submits that the present disclosure is not anticipated by Herfeld.

Herfeld does not anticipate the present invention because Herfeld does not disclose all of the elements of the named invention as claimed in claims 11-14, and 16. First, Herfeld is missing a container central duct forming a flow duct for process air flowing from an upper end of said container central duct to a lower end of said container central duct and immediately opening into lower region of said process chamber as required by independent claim 11. Rather the container central duct disclosed in Herfeld opens into a space below and outside of the process chamber 4. Second, Herfeld is missing a container central duct widening circumferentially and opening towards the upper region of the process chamber as required by independent claim 11.

Herfeld does not anticipate the present invention because Herfeld does not disclose all of the elements of the named invention as claimed in currently amended claim 26. Herfeld is missing fan blades whose radially outer ends at least partly project into said opening area of said container central duct into said process chamber. The fan blades disclosed in Herfeld do not project into the process chamber as shown in FIG. 5 of Herfeld.

There is no motivation to modify Herfeld to arrive at the claimed invention. There is no suggestion that a central duct widening circumferentially and opening to-

wards the upper region of the process chamber as required by independent claim 11. Rather Herfeld teaches that the central duct opens into a space below and outside the process chamber. Further, Herfeld teaches the use of an external feeder hopper. If one were to modify Herfeld to arrive at the claimed invention, they would likely achieve an Apparatus for treating particulate with an external hopper.

For the foregoing reasons, Applicant respectfully submits that pending claims 11-14, 16, and 26-28 are patentable over Herfeld.

The Examiner has rejected claims 11-12, 16, 22 and 26 under 35 U.S.C. 102(b) as being anticipated by Hyde et al. (U.S. Patent No. 4,002,325). The Applicant respectfully submits that the present disclosure is not anticipated by Herfeld.

Hyde et al. does not disclose all of the elements of the named invention claimed in claims 11-12, 16, 22, and 26. Hyde is missing a container central duct separated from the process chamber as required by independent claim 11, and independent claim 26. Rather the column 56 disclosed in Hyde is the mixing chamber itself, because the material to be wetted is filled through the funnel 54 and then falls straight through to the bottom of the column (Column 4; lines 49 to 55). Hyde is also missing a fan arranged in a lower region of said container central duct as required by independent claim 26. Rather, Hyde et al. discloses a deflection plate 138 inside the body 12 at a location below the column. This plate is provided as a trap for dust. Second, Hyde et al. is missing a container central duct widening circumferentially and opening towards the upper region of the process chamber as required by independent claim 11.

There is no motivation or teaching to modify Hyde et al. to arrive at the claimed invention. There is no suggestion that a deflection plate will work in the present inven-

tion to produce a flow of said process air in said container central duct from top to bottom. Further, there is no teaching that the fan blades project from the central opening area of the central duct into the process chamber. Further there is no suggestion of a container central duct widening circumferentially and opening towards the upper region of the process chamber as required by independent claim 11. Nonetheless, even if one were to make the modification suggested, one would get a deflection plate arranged immediately adjacent to an opening area of said container central duct, as opposed to a fan.

For the foregoing reasons, Applicant respectfully submits that pending claims 11–12, 16, 22 and 26 are patentable over Hyde et al.

Applicant gratefully acknowledge the Examiner's indication that claims 15, 17-18, 20-21, 24-25, 29 and 31-32 contain allowable subject matter.

For the foregoing reasons, Applicant respectfully submits that pending claims are allowable over the cited references.

Respectfully submitted,

/s/

January 19, 2006

Wesley W. Whitmyer, Jr., Registration No. 33,558
Attorney for Applicant
ST.ONGE STEWARD JOHNSTON & REENS LLC
986 Bedford Street
Stamford, CT 06905-5619
203 324-6155